

US EPA ARCHIVE DOCUMENT

Kalamazoo River

RI/RA Status

Source Area RA Work Plan

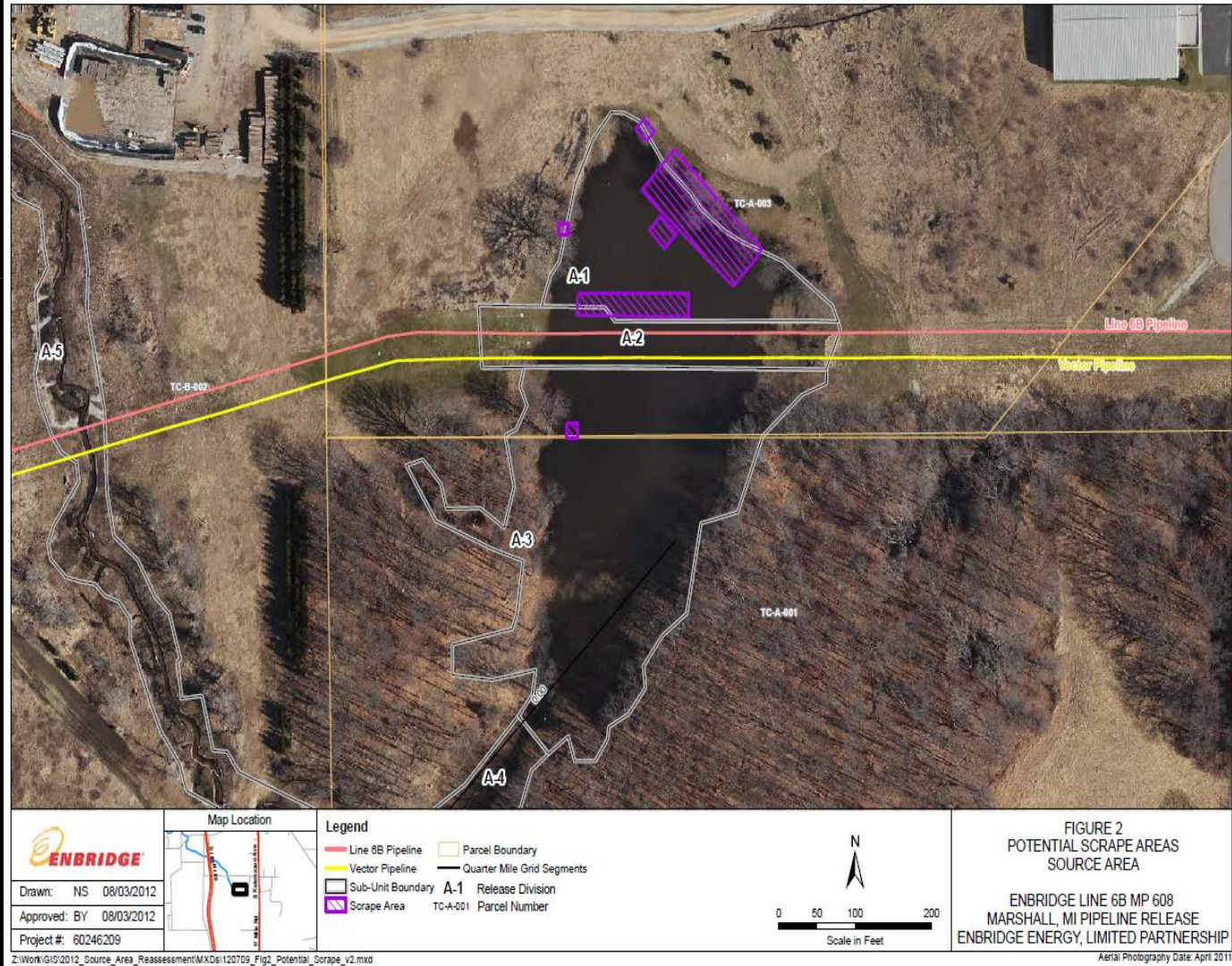
- Approved Aug 14 with comments

Source Area Wetlands Permit

- On public notice by Aug 17 (21-day process)

Kalamazoo River RI

- Schedule



Submerged Oil Agitation Effectiveness



Agitation Study Status

- Post-processing of LISST data (8-17-12)
- Reporting of analytical data (TBD)
- Data evaluation by U.S. EPA/MDEQ

Core Logging Program

- Scope/Schedule TBD based on pilot study results



Submerged Oil Quantification



Validation Process Pilot Study

- Update on sample processing & analysis schedule
- Shipment of samples to Dr. Lee

Core Logging Program

- Scope/Schedule TBD based on pilot study results



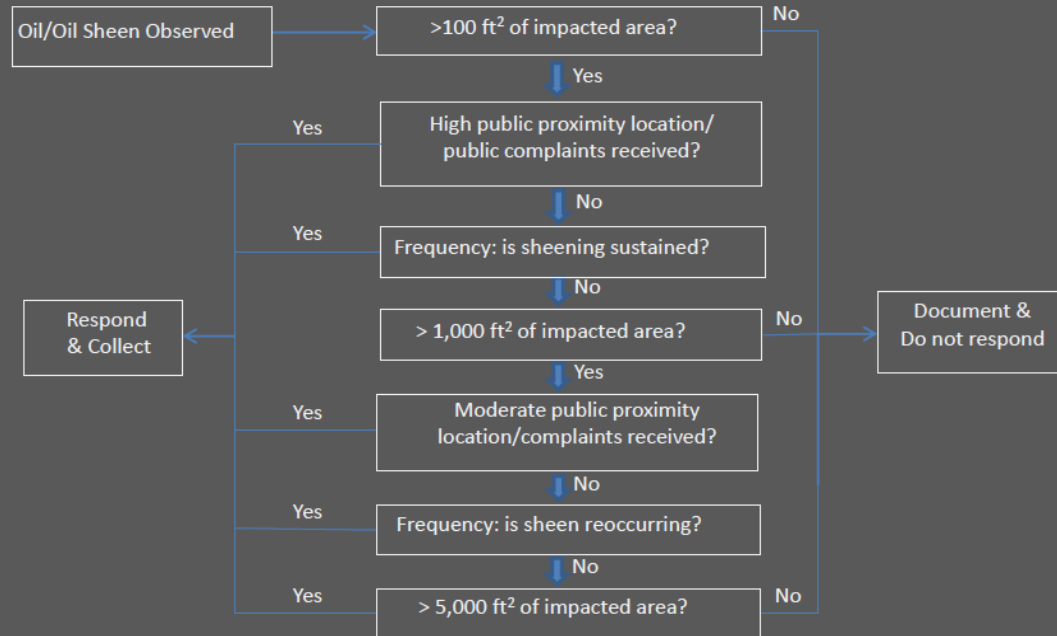
Emerging Oil Management



Recurring Sheen - August 2012

- Ceresco - (10)
- MP 10.75 (OSCAR)
- Mill Ponds - (4)
- MP 21.5 - (10)
- MP 23.25 - (9)
- MP 26.00 - (9)
- MP 26.25 - (9)
- MP 28.25 - (9)
- MP 30.8 - (1)
- MP 36.5 - (1)
- MP 37.75 - (1)
- MP 37.9 - (10)
- ML Fan - (8)
- MP 38.75 - (10)

Emerging Oil Management Program Decision Flow Chart (RV 8/9/2012)



Emerging Oil Management

Ceresco



Emerging Oil Management



MP 10.75 Sediment Trap

- Oil/Sheen observed 8-13-12
- Apparent sheening bank
- SORT sheen polygon 2012
- OSCAR considerations



Emerging Oil Management

MP 10.75 Sediment Trap



Emerging Oil Management Mill Ponds



GIS

Poling Data Review



GIS Review of Sheen Management/Tracking

Sediment Trap

Monitoring & Maintenance



Phase I Traps (6)

- Monitoring schedule
- Data review for recovery triggers
- CSD data assessment for
 - Sed/Oil Accumulation
- Walling tube data review for
 - Sed/Oil transport

Phase II Traps (14)

- Structure installations
- Survey/Monitoring schedule
- River stage considerations

Reporting Schedule

- Monthly/Quarterly



Submerged Oil

Site-Wide Monitoring



Morrow Lake/Morrow Lake Delta

- Reduce poling frequency for monitoring of Morrow Lake and Morrow Lake Delta to once per month or after event driven flow rates exceeding 800 cfs at Battle Creek gauging station
- Implement formal monitoring of E4 Alternative Containment System based on requirements provided by EPA/MDEQ – discussions continue today
- Consolidate components into revised Morrow Lake Monitoring, Assessment and Management Plan

Conduct NEBA Recommended Monitoring (Poling)

- 8-10 Locations from above Ceresco Dam to upstream of 35th Street Bridge
- NEBA recommended locations and a few locations where frequent sheen observances have been noted
- Details of focus areas to be poled being further discussed

Submerged Oil Site-Wide Monitoring



Conduct Poling at Identified Locations Downstream of Morrow Lake Dam

- Required Summer poling assessment in approved CWP – discussions continue between Enbridge and EPA

Water Level/Temperature Monitoring

- Water Level and Flow Data
 - Data downloaded daily from three USGS Gauging stations and reported in weekly metrics
- Surface Water and Sediment Temperature Data
 - Data collected routinely associated with ongoing Operational activities at locations where ongoing work is occurring (poling work, coring work, agitation effects study work, sheen management, etc)
 - Data recorded and reported to EPA/MDEQ through routine metrics

GIS

Poling Data Review



GIS Review of E4 Control Point System Monitoring Data

Enbridge Document Summary



Enbridge Outstanding Documents Summary

- 19 Work Plans
- 2 Supplements to work plans
- 3 Standard Operating Procedure (SOP) documents
- 1 Quality Assurance Project Plan (QAPP)

*Reconciliation meeting scheduled for 8-15-12

Transition

EPA/MDEQ



TRANSITION DISCUSSION